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     (FILE 'HOME' ENTERED AT 12:07:12 ON 28 JAN 2003)

     FILE 'MEDLINE, BIOTECHDS, EMBASE, BIOSIS, SCISEARCH, CANCERLIT, CAPLUS'
     ENTERED AT 12:07:30 ON 28 JAN 2003
L1           164 S KEITH N?/AU
L2             7 S L1 AND TELOMERASE
L3             2 S L2 AND PROMOTER
L4         13878 S ZHAO J?/AU
L5            47 S L4 AND TELOMERASE
L6           289 S L4 AND PROMOTER
L7            23 S L5 AND PROMOTER
L8             8 DUP REM L7 (15 DUPLICATES REMOVED)
L9          2690 S TELOMERASE RNA
L10           25 S L9 AND PROMOTER SEQUEN?
L11           23 S L10 AND HUMAN
L12            0 S L10 AND CYTOTOXIN
L13            1 S L9 AND CYTOTOXIN
L14          520 S KEITH W?/AU
L15          113 S L14 AND TELOMERASE
L16           42 S L15 AND PROMOTER
L17           17 DUP REM L16 (25 DUPLICATES REMOVED)

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Cloning and characterization of human and mouse **telomerase** RNA gene **promoter** sequences.

AUTHOR: **Zhao J Q**; Hoare S F; McFarlane R; Muir S; Parkinson E K; Black D M; Keith W N

CORPORATE SOURCE: CRC Department of Medical Oncology, University of Glasgow, UK.

SOURCE: ONCOGENE, (1998 Mar 12) 16 (10) 1345-50.
Journal code: 8711562. ISSN: 0950-9232.

PUB. COUNTRY: ENGLAND: United Kingdom

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

OTHER SOURCE: GENBANK-AF047386; GENBANK-AF047387

ENTRY MONTH: 199804

ENTRY DATE: Entered STN: 19980507
Last Updated on STN: 19980507
Entered Medline: 19980429

AB Variation in **telomerase** activity is correlated with cellular senescence and tumour progression. However, although the enzymatic activity of **telomerase** has been well studied, very little is known about how expression of **telomerase** genes is regulated in mammalian cells. We have therefore cloned the **promoter** regions of the human (hTR), and mouse, (terc), **telomerase** RNA genes in order to identify the regulatory elements controlling **telomerase** RNA gene transcription. 1.76 kb encompassing the hTR gene **promoter** region was sequenced, as was 4 kb encompassing the terc **promoter** . No significant sequence similarity could be detected in comparisons between human and mouse 5'-regions, flanking the transcribed sequences. However, both the human and mouse **telomerase** RNA genes are within CpG islands and may therefore be under the regulation of DNA methylation. Transient expression of hTR-reporter gene constructs in HeLa and GM847 cells identified the elements responsible for **promoter** activity are contained in a 231 bp region upstream of the transcriptional start site. Transient expression of terc-reporter gene constructs in Swiss3T3 and A9 cells identified the elements responsible for **promoter** activity are contained in a 73 bp region upstream of the transcriptional start site. These studies have implications for novel transcription targeted cancer therapies.

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NEWS 3	Apr 09	BEILSTEIN: Reload and Implementation of a New Subject Area
NEWS 4	Apr 09	ZDB will be removed from STN
NEWS 5	Apr 19	US Patent Applications available in IFICDB, IFIPAT, and IFIUDB
NEWS 6	Apr 22	Records from IP.com available in CAPLUS, HCAPLUS, and ZCAPLUS
NEWS 7	Apr 22	BIOSIS Gene Names now available in TOXCENTER
NEWS 8	Apr 22	Federal Research in Progress (FEDRIP) now available
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NEWS 16	Aug 08	CANCERLIT reload
NEWS 17	Aug 08	PHARMAMarketLetter(PHARMAML) - new on STN
NEWS 18	Aug 08	NTIS has been reloaded and enhanced
NEWS 19	Aug 19	Aquatic Toxicity Information Retrieval (AQUIRE) now available on STN
NEWS 20	Aug 19	IFIPAT, IFICDB, and IFIUDB have been reloaded
NEWS 21	Aug 19	The MEDLINE file segment of TOXCENTER has been reloaded
NEWS 22	Aug 26	Sequence searching in REGISTRY enhanced
NEWS 23	Sep 03	JAPIO has been reloaded and enhanced
NEWS 24	Sep 16	Experimental properties added to the REGISTRY file
NEWS 25	Sep 16	CA Section Thesaurus available in CAPLUS and CA
NEWS 26	Oct 01	CASREACT Enriched with Reactions from 1907 to 1985
NEWS 27	Oct 21	EVENTLINE has been reloaded
NEWS 28	Oct 24	BEILSTEIN adds new search fields
NEWS 29	Oct 24	Nutraceuticals International (NUTRACEUT) now available on STN
NEWS 30	Oct 25	MEDLINE SDI run of October 8, 2002
NEWS 31	Nov 18	DKILIT has been renamed APOLLIT
NEWS 32	Nov 25	More calculated properties added to REGISTRY
NEWS 33	Dec 02	TIBKAT will be removed from STN
NEWS 34	Dec 04	CSA files on STN
NEWS 35	Dec 17	PCTFULL now covers WP/PCT Applications from 1978 to date
NEWS 36	Dec 17	TOXCENTER enhanced with additional content
NEWS 37	Dec 17	Adis Clinical Trials Insight now available on STN
NEWS 38	Dec 30	ISMEC no longer available
NEWS 39	Jan 13	Indexing added to some pre-1967 records in CA/CAPLUS

NEWS 40 Jan 21 NUTRACEUT offering one free connect hour in February 2003
NEWS 41 Jan 21 PHARMAML offering one free connect hour in February 2003

NEWS EXPRESS January 6 CURRENT WINDOWS VERSION IS V6.01a,
CURRENT MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP),
AND CURRENT DISCOVER FILE IS DATED 01 OCTOBER 2002
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FILE 'HOME' ENTERED AT 15:59:58 ON 28 JAN 2003

=> file .biotech caplus
COST IN U.S. DOLLARS SINCE FILE ENTRY TOTAL SESSION
FULL ESTIMATED COST 0.21 0.21

FILES 'MEDLINE, BIOTECHDS, EMBASE, BIOSIS, SCISEARCH, CANCERLIT, CAPLUS'
ENTERED AT 16:00:08 ON 28 JAN 2003
ALL COPYRIGHTS AND RESTRICTIONS APPLY. SEE HELP USAGETERMS FOR DETAILS.

7 FILES IN THE FILE LIST

=> s telomerase and cytotoxin
L1 3 TELOMERASE AND CYTOTOXIN

=> dup rem l1
PROCESSING COMPLETED FOR L1
L2 3 DUP REM L1 (0 DUPLICATES REMOVED)

=> d l2 ibib abs 1-3

L2 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2002:408788 CAPLUS
DOCUMENT NUMBER: 136:398184
TITLE: Method of producing differentiated cells suitable for human therapy using negative selection of undifferentiated cells
INVENTOR(S): Gold, Joseph D.; Lebrowski, Jane S.
PATENT ASSIGNEE(S): Geron Corporation, USA
SOURCE: PCT Int. Appl., 67 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002042445	A2	20020530	WO 2001-US44309	20011126

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

US 2002098582	A1	20020725	US 2001-783203	20010213
AU 2002037681	A5	20020603	AU 2002-37681	20011126
GB 2374076	A1	20021009	GB 2001-28409	20011127

PRIORITY APPLN. INFO.:

US 2000-253357P	P	20001127
US 2000-253443P	P	20001127
US 2001-783203	A	20010213
US 2000-253395P	P	20001127
WO 2001-US44309	W	20011126

AB This invention provides a system for producing differentiated cells from a stem cell population by depleting relatively undifferentiated cells. A heterogeneous cell population is treated with a vector that puts a lethal or potentially lethal effector gene under control a transcriptional element (such as the TERT promoter) that causes the gene to be expressed in the relatively undifferentiated cell subpopulation. Expression of the effector gene results in depletion of undifferentiated cells, or expression of a marker that can be used to remove them later. Suitable effector sequences encode a toxin, a protein that induces apoptosis, a cell-surface antigen, or an enzyme (such as thymidine kinase) that converts a prodrug into a substance that is lethal to the cell. The differentiated cell populations produced according to this disclosure are suitable for use wherever a relatively homogeneous cell population is desirable, such as in tissue regeneration, and non-therapeutic applications such as drug screening.

L2 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2000:553688 CAPLUS
DOCUMENT NUMBER: 133:160584
TITLE: Regulatory elements of the **telomerase** reverse transcriptase gene and their use in the expression of genes in proliferating cells
INVENTOR(S): Morin, Gregg B.; Lichtsteiner, Serge; Vasserot, Alain;
Adams, Robert; Cardoza, Lisa M.; Lebkowski, Jane S.
PATENT ASSIGNEE(S): Geron Corporation, USA
SOURCE: PCT Int. Appl., 63 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000046355	A2	20000810	WO 2000-US3104	20000204

WO 2000046355 A3 20001130
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
EP 1147181 A2 20011024 EP 2000-917613 20000204
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO
PRIORITY APPLN. INFO.: US 1999-244438 A 19990204
WO 2000-US3104 W 20000204

AB **Telomerase** reverse transcriptase is part of the **telomerase** complex responsible for maintaining telomere length and increasing the replicative capacity of progenitor cells. **Telomerase** activity is turned off in mature differentiated cells, but is turned back on again in hyperplastic diseases, including many cancers. This disclosure provides regulatory elements that promote transcription in cells that express **telomerase** reverse transcriptase (TERT). Oncolytic viruses are described, in which a toxin or a genetic element essential for viral replication is placed under control of the TERT promoter. As a result, the virus replicates preferentially in cells expressing TERT, and selectively lyse cancer cells. The viral constructs of this invention hold considerable promise for the treatment of previously intractable malignancies. Expression of the gene is strongly induced by direct interaction between c-Myc protein and the promoter at an E box. The promoter can therefore be used to drive expression of cytotoxic genes in c-Myc-dependent tumors.

L2 ANSWER 3 OF 3 BIOTECHDS COPYRIGHT 2003 THOMSON DERWENT AND ISI
ACCESSION NUMBER: 1999-13404 BIOTECHDS
TITLE: Mouse and human **telomerase** RNA gene promoters, useful for tumor specific gene therapy; vector plasmid pGT62-codAupp-mediated thymidine-kinase gene transfer and expression in host cell and antisense oligonucleotide for cancer therapy
AUTHOR: Keith W N
PATENT ASSIGNEE: Cancer-Res.Campaign-Technol.
LOCATION: London, UK.
PATENT INFO: WO 9928964 5 Aug 1999
APPLICATION INFO: WO 1999-GB308 29 Jan 1999
PRIORITY INFO: GB 1998-1902 29 Jan 1998
DOCUMENT TYPE: Patent
LANGUAGE: English
OTHER SOURCE: WPI: 1999-479183 [40]
AN 1999-13404 BIOTECHDS
AB A nucleic acid molecule (NAM) (I) which consists of a **telomerase** RNA (TR) gene promoter, is new. Also claimed are: a NAM with promoter activity which is capable of hybridizing to the complementary sequence of (I) under stringent conditions; a nucleic acid construct containing TR promoter region or a fragment, mutant, allele derivative or variant able to promote transcription, operably linked to a heterologous gene, a vector or host cell containing (I) or the nucleic acid construct; culturing of the host cells; screening for the ability of a substance to modulate the activity of the TR promoter; a substance with the ability to

modulate TR promoter activity; and a system for control of cancer which involves a vector of other delivery system capable of selectively infecting tumor cells, which contains (I) operably linked to either DNA or RNA encoding an enzyme. The TR gene promoter may be linked to a heterologous gene, especially one encoding a **cytotoxin**, for cancer therapy. Antisense oligonucleotides may also be used for cancer gene therapy, especially using vector plasmid pGT62-codAupp, which contains virus thymidine-kinase (EC-2.7.1.21) and (I). (89pp)